

**WE CLAIM:**

1. A computer program product operable to control an e-mail client computer to  
5 detect e-mail propagated malware, said computer program product comprising:

e-mail generating logic operable to generate an e-mail message;

comparison logic operable to compare said e-mail message with at least one of  
an address book of a sender of said e-mail message and one or more previously  
generated e-mail messages from said client computer; and

10 identifying logic operable to identify said e-mail message as potentially  
containing malware if at least one of:

(i) said e-mail message is being sent to more than a threshold number of  
addressees specified within said address book;

(ii) said e-mail message contains message content having at least a threshold  
15 level of similarity to message content of said previously generated e-mail messages  
being sent to more than a threshold number of addressees specified within said  
address book; and

(iii) said e-mail message contains message content having at least a threshold  
level of similarity to message content of more than a threshold number of said  
20 previously generated e-mail messages.

2. A computer program product as claimed in claim 1, wherein said e-mail  
message specifies a plurality of addressees, said comparison logic being operable to  
compare said plurality of addressees with said e-mail address book to determine if  
25 said at least a threshold number of addressees has been exceeded.

3. A computer program product as claimed in claim 1, wherein said at least a  
threshold number of addressees is specified as a proportion of addressees within said  
address book.

4. A computer program product as claimed in claim 3, wherein said proportion of  
addressees within said address book is user specified.

5. A computer program product as claimed in claim 1, comprising quarantine queue logic operable to hold said previously generated e-mail messages in a quarantine queue for at least a predetermined quarantine period prior to being sent from said client computer.

5

6. A computer program product as claimed in claim 5, wherein said quarantine period is user specified.

7. A computer program product as claimed in claim 1, comprising confirmation  
10 input logic operable when said e-mail message is identified as potentially containing malware to generate a user message seeking a confirmation input from a user of said client computer before said e-mail message is sent.

8. A computer program product as claimed in claim 1, comprising administrator  
15 warning logic operable when said e-mail message is identified as potentially containing malware to send an administrator warning message to an administrator of said client computer regarding said e-mail message.

9. A method of detecting e-mail propagated malware within an e-mail client  
20 computer, said method comprising the steps of:

generating an e-mail message;

comparing said e-mail message with at least one of an address book of a sender of said e-mail message and one or more previously generated e-mail messages from said client computer; and

25 identifying said e-mail message as potentially containing malware if at least one of:

(i) said e-mail message is being sent to more than a threshold number of addressees specified within said address book;

(ii) said e-mail message contains message content having at least a threshold  
30 level of similarity to message content of said previously generated e-mail messages being sent to more than a threshold number of addressees specified within said address book; and

(iii) said e-mail message contains message content having at least a threshold level of similarity to message content of more than a threshold number of said previously generated e-mail messages.

5 10. A method as claimed in claim 9, wherein said e-mail message specifies a plurality of addressees, said plurality of addressees being compared with said e-mail address book to determine if said at least a threshold number of addressees has been exceeded.

10 11. A method as claimed in claim 9, wherein said at least a threshold number of addressees is specified as a proportion of addressees within said address book.

12. A method as claimed in claim 11, wherein said proportion of addressees within said address book is user specified.

15 13. A method as claimed in claim 9, wherein said previously generated e-mail messages are held in a quarantine queue for at least a predetermined quarantine period prior to being sent from said client computer.

20 14. A method as claimed in claim 13, wherein said quarantine period is user specified.

15. A method as claimed in claim 9, wherein when said e-mail message is identified as potentially containing malware, then a user message is generated seeking  
25 a confirmation input from a user of said client computer before said e-mail message is sent.

16. A method as claimed in claim 9, wherein when said e-mail message is identified as potentially containing malware, then an administrator warning message  
30 is sent to an administrator of said client computer regarding said e-mail message.

17. Apparatus for detecting e-mail propagated malware within a client computer, said apparatus comprising:

an e-mail generator operable to generate an e-mail message;

a comparator operable to compare said e-mail message with at least one of an address book of a sender of said e-mail message and one or more previously generated e-mail messages from said client computer; and

a malware identifier operable to identify said e-mail message as potentially containing malware if at least one of:

(i) said e-mail message is being sent to more than a threshold number of addressees specified within said address book;

(ii) said e-mail message contains message content having at least a threshold level of similarity to message content of said previously generated e-mail messages being sent to more than a threshold number of addressees specified within said address book; and

(iii) said e-mail message contains message content having at least a threshold level of similarity to message content of more than a threshold number of said previously generated e-mail messages.

18. Apparatus as claimed in claim 17, wherein said e-mail message specifies a plurality of addressees, said comparator being operable to compare said plurality of addressees with said e-mail address book to determine if said at least a threshold number of addressees has been exceeded.

19. Apparatus as claimed in claim 1, wherein said at least a threshold number of addressees is specified as a proportion of addressees within said address book.

20. Apparatus as claimed in claim 19, wherein said proportion of addressees within said address book is user specified.

21. Apparatus as claimed in claim 17, comprising a quarantine queue operable to hold said previously generated e-mail messages in a quarantine queue for at least a predetermined quarantine period prior to being sent from said client computer.

22. Apparatus as claimed in claim 21, wherein said quarantine period is user specified.

23. Apparatus as claimed in claim 17, comprising a confirmation input unit operable when said e-mail message is identified as potentially containing malware to generate a user message seeking a confirmation input from a user of said client computer before said e-mail message is sent.

5

24. Apparatus as claimed in claim 17, comprising an administrator warning unit operable when said e-mail message is identified as potentially containing malware to send an administrator warning message to an administrator of said client computer regarding said e-mail message.